

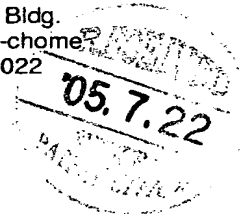
**PCT**

NOTIFICATION OF TRANSMITTAL  
OF COPIES OF TRANSLATION  
OF THE INTERNATIONAL PRELIMINARY REPORT  
ON PATENTABILITY  
(CHAPTER I OR CHAPTER II  
OF THE PATENT COOPERATION TREATY)  
(PCT Rule 72.2)

From the INTERNATIONAL BUREAU

To:

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Date of mailing ( <i>day/month/year</i> ) 14 July 2005 (14.07.2005)	
Applicant's or agent's file reference S03P1352WO00	IMPORTANT NOTIFICATION
International application No. PCT/JP2003/014698	International filing date ( <i>day/month/year</i> ) 19 November 2003 (19.11.2003)
Applicant SONY CORPORATION et al	

**1. Transmittal of the translation to the applicant.**

The International Bureau transmits herewith a copy of the English translation made by the International Bureau of the international preliminary examination report established by the International Preliminary Examining Authority.

**2. Transmittal of the copy of the translation to the elected Offices.**

The International Bureau notifies the applicant that copies of that translation have been transmitted to the following elected Offices requiring such translation:

CN, KR

The following elected Offices, having waived the requirement for such a transmittal at this time, will receive copies of that translation from the International Bureau only upon their request:

US

**3. Reminder regarding translation into (one of) the official language(s) of the elected Office(s).**

The applicant is reminded that, where a translation of the international application must be furnished to an elected Office, that translation must contain a translation of any annexes to the international preliminary examination report.

It is the applicant's responsibility to prepare and furnish such translation directly to each elected Office concerned (Rule 74.1). See Volume II of the PCT Applicant's Guide for further details.

The International Bureau of WIPO  
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Translation

PATENT COOPERATION TREATY

PCT/JP2003/014698



# PCT

## INTERNATIONAL PRELIMINARY REPORT ON PATENTABILITY (Chapter II of the Patent Cooperation Treaty)

(PCT Article 36 and Rule 70)

Applicant's or agent's file reference S03P1352WO00	FOR FURTHER ACTION	See Form PCT/IPEA/416
International application No. PCT/JP2003/014698	International filing date (day/month/year) 19 November 2003 (19.11.2003)	Priority date (day/month/year) 26 November 2002 (26.11.2002)
International Patent Classification (IPC) or national classification and IPC H04B 1/16, H04N 5/445		
Applicant SONY CORPORATION		

1. This report is the international preliminary examination report, established by this International Preliminary Examining Authority under Article 35 and transmitted to the applicant according to Article 36.
2. This REPORT consists of a total of <u>4</u> sheets, including this cover sheet.
3. This report is also accompanied by ANNEXES, comprising: a. <input checked="" type="checkbox"/> (sent to the applicant and to the International Bureau) a total of <u>2</u> sheets, as follows: <div style="margin-left: 40px;"><input type="checkbox"/> sheets of the description, claims and/or drawings which have been amended and are the basis of this report and/or sheets containing rectifications authorized by this Authority (see Rule 70.16 and Section 607 of the Administrative Instructions). <input type="checkbox"/> sheets which supersede earlier sheets, but which this Authority considers contain an amendment that goes beyond the disclosure in the international application as filed, as indicated in item 4 of Box No. I and the Supplemental Box.</div> b. <input type="checkbox"/> (sent to the International Bureau only) a total of (indicate type and number of electronic carrier(s)) _____, containing a sequence listing and/or tables related thereto, in computer readable form only, as indicated in the Supplemental Box Relating to Sequence Listing (see Section 802 of the Administrative Instructions).
4. This report contains indications relating to the following items: <div style="margin-left: 20px;"><input checked="" type="checkbox"/> Box No. I Basis of the report <input type="checkbox"/> Box No. II Priority <input type="checkbox"/> Box No. III Non-establishment of opinion with regard to novelty, inventive step and industrial applicability <input type="checkbox"/> Box No. IV Lack of unity of invention <input checked="" type="checkbox"/> Box No. V Reasoned statement under Article 35(2) with regard to novelty, inventive step or industrial applicability; citations and explanations supporting such statement <input type="checkbox"/> Box No. VI Certain documents cited <input type="checkbox"/> Box No. VII Certain defects in the international application <input type="checkbox"/> Box No. VIII Certain observations on the international application</div>

Date of submission of the demand 21 May 2004 (21.05.2004)	Date of completion of this report 30 November 2004 (30.11.2004)
Name and mailing address of the IPEA/JP	Authorized officer
Facsimile No.	Telephone No.

## INTERNATIONAL PRELIMINARY REPORT ON PATENTABILITY

International application No.

PCT/JP2003/014698

## Box No. I Basis of the report

1. With regard to the language, this report is based on the international application in the language in which it was filed, unless otherwise indicated under this item.

- ☐ This report is based on translations from the original language into the following language \_\_\_\_\_, which is language of a translation furnished for the purpose of:
- ☐ international search (under Rules 12.3 and 23.1(b))
- ☐ publication of the international application (under Rule 12.4)
- ☐ international preliminary examination (under Rules 55.2 and/or 55.3)

2. With regard to the elements of the international application, this report is based on *(replacement sheets which have been furnished to the receiving Office in response to an invitation under Article 14 are referred to in this report as "originally filed" and are not annexed to this report)*:

- ☐ The international application as originally filed/furnished
- ☒ the description:
- pages \_\_\_\_\_ 1-18 \_\_\_\_\_, as originally filed/furnished
- pages\* \_\_\_\_\_ received by this Authority on \_\_\_\_\_
- pages\* \_\_\_\_\_ received by this Authority on \_\_\_\_\_
- ☒ the claims:
- pages \_\_\_\_\_ 2 \_\_\_\_\_, as originally filed/furnished
- pages\* \_\_\_\_\_ 1, 5, 8, 9 \_\_\_\_\_, as amended (together with any statement) under Article 19
- pages\* \_\_\_\_\_ received by this Authority on \_\_\_\_\_
- pages\* \_\_\_\_\_ received by this Authority on \_\_\_\_\_
- ☒ the drawings:
- pages \_\_\_\_\_ 1-8 \_\_\_\_\_, as originally filed/furnished
- pages\* \_\_\_\_\_ received by this Authority on \_\_\_\_\_
- pages\* \_\_\_\_\_ received by this Authority on \_\_\_\_\_
- ☐ a sequence listing and/or any related table(s) – see Supplemental Box Relating to Sequence Listing.

3. ☒ The amendments have resulted in the cancellation of:

- ☐ the description, pages \_\_\_\_\_
- ☒ the claims, Nos. \_\_\_\_\_ 3, 4, 6, 7 \_\_\_\_\_
- ☐ the drawings, sheets/figs \_\_\_\_\_
- ☐ the sequence listing (*specify*): \_\_\_\_\_
- ☐ any table(s) related to sequence listing (*specify*): \_\_\_\_\_

4. ☐ This report has been established as if (some of) the amendments annexed to this report and listed below had not been made, since they have been considered to go beyond the disclosure as filed, as indicated in the Supplemental Box (Rule 70.2(c)).

- ☐ the description, pages \_\_\_\_\_
- ☐ the claims, Nos. \_\_\_\_\_
- ☐ the drawings, sheets/figs \_\_\_\_\_
- ☐ the sequence listing (*specify*): \_\_\_\_\_
- ☐ any table(s) related to sequence listing (*specify*): \_\_\_\_\_

\* If item 4 applies, some or all of those sheets may be marked "superseded."

# INTERNATIONAL PRELIMINARY EXAMINATION REPORT

International application No.  
PCT/JP 03/14698

## V. Reasoned statement under Article 35(2) with regard to novelty, inventive step or industrial applicability; citations and explanations supporting such statement

### 1. Statement

Novelty (N)	Claims	1, 2, 5, 8, 9	YES
	Claims		NO
Inventive step (IS)	Claims		YES
	Claims	1, 2, 5, 8, 9	NO
Industrial applicability (IA)	Claims	1, 2, 5, 8, 9	YES
	Claims		NO

### 2. Citations and explanations

Document 1: JP 2-46045 A (Toshiba Corp.), 15 February 1990

Document 2: JP 2000-138722 A (Matsushita Electric Industrial Co., Ltd.), 16 May 2000

Document 3: JP 2001-24620 A (Matsushita Electric Industrial Co., Ltd.), 26 January 2001

The inventions described in claims 1, 2, 5, 8, and 9 do not involve an inventive step in the light of document 1 or document 2 and document 3 cited in the international search report.

Document 1 (claim 1, claim 2, page 4, lower left column, lines 6 to 20, fig. 2, fig. 3) discloses an invention for use in QPSK signal demodulation, wherein the dispersion of an amplitude component and the dispersion of a phase component are compared, and when dispersion in the phase component is greater, phase noise is determined to be present, and the bandwidth of a loop filter is controlled according to the size of the phase noise.

Document 2 (claim 3, paragraphs [0066] to [0068], fig. 11) discloses an invention of a PSK demodulator wherein the amount of phase noise in an input signal is detected from the ratio of error in the amplitude direction to error in the phase direction at the encoding

point of the demodulated signal, and automatic adjustments are made so that the loop gain in the second-stage carrier wave playback loop is optimized.

Meanwhile, as disclosed in document 3 (paragraph [0015], fig. 3), which discloses an invention of a digital signal-receiving device wherein when phase modulation is used as the carrier modulation method, a phase threshold value is provided as the threshold value for a signal space diagram, and when a symbol point exceeding the threshold value occurs, an indicator is made to light up, thereby notifying of signal-receiving status, the provision of a signal-receiving status indicator part that makes it possible for a user to determine signal-receiving status is nothing more than standard practice in the field of signal-receiving devices; thus, upon consideration of user convenience, a person skilled in the art could easily conceive of providing a signal-receiving status indicator part such as the one found in document 3 on the invention disclosed in document 1 or document 2.